

DOCUMENT RESUME

ED 387 283

RC 020 228

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TITLE Bilingualism, Second Language Acquisition, and the Education of Chicano Language Minority Students. Chapter 4.
PUB DATE 93
NOTE 29p.; In: Chicano School Failure and Success: Research and Policy Agendas for the 1990s; see RC 020 224.
PUB TYPE Information Analyses (070)
EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS Bilingual Education Programs; *Bilingualism; Bilingual Students; Cognitive Processes; Educational Legislation; Educational Policy; Educational Practices; Educational Theories; Elementary Secondary Education; English (Second Language); Language Acquisition; *Language Research; *Mexican American Education; Mexican Americans; *Second Language Learning; Social Influences; *Spanish Speaking
IDENTIFIERS *Chicanos; Hispanic American Students; *Language Minorities

ABSTRACT

This chapter addresses the theoretical and empirical knowledge bases related to bilingualism and second language acquisition in Chicano children. Research concerning bilingual acquisition has found that the linguistic, cognitive, and social characters of the bilingual child develop simultaneously. Furthermore, all three areas of development are interrelated and directly influence the acquisition of linguistic and cognitive repertoires. Research indicates that second language acquisition is influenced by native language linguistic structures and rules of discourse, may be influenced by the motivation to learn a second language, and is related to various social factors. Educational programs serving language minority students can be differentiated by the way they utilize the native language and English during instruction. For example, a survey of 333 school districts serving over 80 percent of language minority students revealed that the use of English predominated in 93 percent of programs, both the native language and English were utilized during instruction in 60 percent, and 30 percent reported minimal or no use of the native language during instruction. The remainder of this chapter overviews federal and state legislative initiatives related to the education of language minority students, and policy and practice implications for education. Contains 98 references. (LP)

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Chapter 4

Bilingualism, Second Language Acquisition, and the Education of Chicano Language Minority Students

Eugene E. Garcia

Our understanding of language continues to expand in its utilization of diverse theories of linguistics, cognition, and socialization (August and Garcia, 1988). What was once considered the study of habits and structure (Chomsky, 1959; Skinner, 1957), has become today an interlocking study of linguistic, psychological, and social domains, each independently significant, but converging in a single attempt to reconstruct the nature of language. It is this multifaceted phenomenon which confronts an educator when addressing the educational appropriation of knowledge in classrooms. For the educator of Chicano language minority students as a constituency, the issue of language becomes particularly important.

Within the last few years, research in language acquisition has shifted from the study of one language (Brown, 1973; Gonzalez, 1970) to the comparative study of children from diverse linguistic societies (Bowerman, 1975; Braine, 1976) and to the study of children acquiring more than one language (Garcia, 1983; Hakuta, 1986; Hakuta and Garcia, 1989; Krashen, 1984; McLaughlin, 1984). The following discussion introduces the theoretical and empirical knowledge bases related to an understanding of bilingualism and second language acquisition in Chicano children. In doing so, bilingual and second language acquisition will be addressed as they relate to linguistic, cognitive and social research and theory which has developed over the last two decades. Such contributions have reshaped in a dramatic way our view of bilingualism. For at the turn of the century, bilingualism in children was considered a linguistic, cognitive, and academic liability (Hakuta, 1986). Today's understanding of bilingualism indicates that bilingualism is not a linguistic liability and may even serve as a cognitive advantage.

The schooling initiatives targeted at Chicano students have at times been synonymous with the schooling endeavor aimed at immigrant students. As Gonzalez (1990) has documented, Chicano children are usually perceived as the 'foreigners', 'intruders', and 'immigrants' who speak a different language and hold values significantly different from the American mainstream. This perspective has led policy makers (including the US Supreme Court) to highlight

the most salient characteristic of the student, the language difference, in their attempts to address the historical academic low achievement of this population. This chapter will include an expanded discussion of this issue which brings together research, theory, educational practice and educational policy of significance to Chicano students.

Bilingual Acquisition

Relative to native monolingual acquisition research, little systematic investigation has been available regarding children who are acquiring more than one language, simultaneously, during the early part of their lives. Recent work in this area however, has centered separately on the linguistic (Garcia and Gonzalez, 1984), cognitive (Cummins, 1979), and social/communicative aspects (Duran, 1981) of the bilingual. That is, research with young bilingual populations has concentrated independently on three areas: (a) the developmental nature of phonology, morphology and syntax; (b) Piagetian and related cognitive attributes of bilingual students; and (c) the social/discourse characteristics of bilingual development. This section reviews research in these areas with an attempt at highlighting similar and disparate theoretical conceptualizations and empirical findings generated by these research endeavors. These conceptualizations are important in addressing the complexities so necessary in understanding Chicano language minority children.

Bilingualism Defined.

It remains difficult to define any term to the satisfaction of the theoretician, researcher and educator. The term bilingualism here suggests the acquisition of two languages during the first 5 to 7 years of life. This definition includes the following conditions:

- 1 Children are able to *comprehend and produce* aspects (lexicon, morphology, and syntax) of each language.
- 2 Children *function 'naturally'* in the two languages as they are used in the form of social interaction. This condition requires a substantive bilingual environment in the child's first 3 to 7 years of life. In many cases this exposure comes from within a nuclear and extended family network but this need not be the case (visitors and extended visits to foreign countries are examples of alternative environments).
- 3 The *simultaneous character of development* must be apparent in both languages. This is contrasted with the case in which a native speaker of one language, who after mastering that one language, begins on a course of second language acquisition.

It is the preceding combined conditions which define the present bilingual population of interest. It is clear from this definition that an attempt is made to include both the child's linguistic abilities in conjunction with the social environ-

ment during an important psychological 'segment' of life (August and Garcia, 1988).

Linguistic Development

It does seem clear that a child can learn more than one linguistic form for communicative purposes in many societies throughout the world. Sorenson (1967) describes the acquisition of three to four languages by young children who live in the Northwest Amazon region of South America. In this Brazilian-Colombian border region, the Tukano tribal language serves as the *lingua franca*, but there continue to exist some twenty-five clearly distinguishable linguistic groups. European colleagues Skutnab-Kangas (1979) and Baetens Beardsmore (1982) have provided expanded discussions regarding the international proliferation of multilingualism. In the United States, Skrabanek (1970), Waggoner (1984) and Hakuta (1986) report that school-age Chicano children in the United States continue to be bilingual with no indication that this phenomenon will be disrupted. By the year 2000 the number of limited-English-speaking Chicano school-age children in the US is estimated to double.

One of the first systematic linguistic investigations of bilingualism in young children was reported by Leopold (1939, 1947, 1949a, 1949b). This author set out to study the simultaneous acquisition of English and German in his own daughter. These initial descriptive reports indicate that as the subject was exposed to both languages during infancy, she seemed to weld both languages into one system during initial language production periods. For instance, early language forms were characterized by free mixing. Language production during later periods seem to indicate that the use of English and German grammatical forms developed independently.

With respect to bilingual development in Chicano children, Padilla and Liebman (1975) report a longitudinal linguistic analysis of Spanish-English acquisition in two 3-year-old children. These researchers followed the model of Brown (1973) in recording linguistic interactions of children over a five-month period. By an analysis of several dependent linguistic variables (phonological, morphological, and syntactic characteristics) over this time period, they observed gains in both languages, although several English forms were in evidence while similar Spanish forms were not. They also report the differentiation of linguistic systems at phonological, lexical and syntactic levels. Padilla and Liebman (1975) conclude:

the appropriate use of both languages in mixed utterances was evident; that is, correct word order was preserved. For example, there were no occurrences of 'raining esta' or 'a es baby', nor was there evidence for such utterances as 'esta raining' and 'es a baby.' There was also an absence of the redundancy of unnecessary words which might tend to confuse meaning.

Garcia (1983) reports developmental data related to the acquisition of Spanish and English for Chicano preschoolers (3-4 years old) and the acquisition of

English for a group of matched English-only speakers. The results of that study can be summarized as follows: (a) acquisition of both Spanish and English was evident at complex morphological levels for Spanish/English 4-year-old children; (b) for the bilingual children studied, English was more advanced based on the quantity and quality of obtained morphological instances of language productions; and (c) there was no quantitative or qualitative difference between Spanish/English bilingual children and matched English-only controls on English language morphological productions.

Huerta (1977) conducted a longitudinal analysis of a Spanish/English Chicano 2-year-old child. She reports a similar pattern of continuous Spanish/English development, although identifiable stages appeared in which one language forged ahead of the other. Moreover, she reports the significant occurrence of mixed language utterance which made use of both Spanish and English vocabulary as well as Spanish and English morphology. In all such cases, these mixed linguistic utterances were well formed and communicative.

Garcia, Maez and Gonzalez (1979) in a study of Chicano bilingual children 4, 5 and 6 years of age, found regional differences in the relative occurrence of switched language utterances. That is, bilingual Spanish/English children from Texas, Arizona, Colorado and New Mexico, showed higher (15–20 per cent) incidences of language switched utterances than children from California or Illinois, especially at pre-kindergarten levels. These findings suggest that some children may very well develop an 'interlanguage' in addition to the acquisition of two independent language systems later in development.

The above 'developmental' linguistic findings can be summarized as follows for Chicano bilingual:

- 1 The acquisition of two languages can be parallel, but, need not be. That is, the qualitative character of one language may lag behind, surge ahead, or develop equally with the other language (Huerta, 1977; Padilla and Liebman, 1975).
- 2 The acquisition of two languages may very well result in an interlanguage, incorporating the attributes (lexicon, morphology and syntax) of both languages. But, this need not be the case. Languages may develop independently (Huerta, 1977; Garcia, Maez and Gonzalez 1979).
- 3 The acquisition of two languages need not hamper, structurally, the acquisition of either language (Garcia, 1983; Hakuta, 1986).

Intelligence, Cognition and Bilingualism

A separate but significant research approach to the understanding of bilingualism and its effects has focused on the cognitive (intellectual) character of the bilingual. Based on correlational studies indicating a negative relationship between childhood bilingualism and performance on standardized tests of intelligence, a causal statement linking bilingualism to 'depressed' intelligence was tempting and this negative conclusion characterized much early work (Darcy, 1953). Due to the myriad of methodological problems of studies investigating this type of relationship, any conclusions concerning bilingualism and intellectual functioning (as

measured by standardized individual or group intelligence tests) are extremely tentative in nature (Darcy, 1963; Diaz, 1983).

With the general shift away from utilizing standardized measures of intelligence with school-age populations of non-English backgrounds, the cognitive character of bilingual children has received attention. Leopold (1939) in one of the first investigations of bilingual acquisition reported a general cognitive plasticity for his young bilingual daughter. He suggested that linguistic flexibility (in the form of bilingualism) was related to a number of non-linguistic, cognitive tasks such as categorization, verbal signal discrimination, and creativity. Peal and Lambert (1962) in a summarization of their work with French/English bilingual and English monolinguals suggested that the intellectual experience of acquiring two languages contributed to advantageous mental flexibility, superior concept formation, and a generally diversified set of mental abilities.

Feldman and Shen (1971), Ianco-Worall (1972), Carringer (1974), and Cummins and Gulatsan (1975) provide relevant evidence regarding such flexibility. Feldman and Shen (1971) report differential responding between Chicano Spanish/English bilingual and English monolinguals across three separate tasks reflecting Piagetian-like problem solving and metalinguistic awareness. Results indicated significantly increased cognitive flexibility for Chicano bilinguals. Ianco-Worall (1972) compared matched bilingual (Afrikaans/English) and monolingual (either Afrikaans or English) on metalinguistic tasks requiring separation of word sounds and word meanings. Comparison of scores on these tasks indicated that bilinguals concentrated more on attaching meaning to words rather than sounds. Ben-Zeev's (1977) work with Hebrew-English bilingual children is also related to the metalinguistic abilities of these children. Subjects in these studies showed superiority in symbol substitution and verbal transformational tasks. Ben-Zeev summarizes: 'Two strategies characterized by thinking patterns of the bilingual in relation to verbal material: readiness to impute structure and readiness to reorganize' (p. 1017).

Recent research specifically with Chicano bilinguals (Kessler and Quinn 1986, 1987) supplies additional empirical support for the emerging understanding that bilingual children outperform monolingual children on specific measures of cognitive and metalinguistic awareness. Kessler and Quinn (1987) had bilingual and monolingual children engage in a variety of symbolic categorization tasks which required their attention to abstract verbal features of concrete objects. Spanish/English, Chicano bilinguals from low socioeconomic status (SES) backgrounds outperformed low SES English monolinguals and high SES English monolinguals on these tasks. Such findings are particularly significant given the criticism by McNab (1979) that many bilingual 'cognitive advantage' studies utilized only high SES subjects of non-US minority backgrounds. It is important to note that findings of metalinguistic advantages have been reported for low SES Puerto Rican students as well (Galambos and Hakuta, 1988).

Theoretical attempts linking bilingualism to cognitive attributes have emerged. In an attempt to identify more specifically the relationship between cognition and bilingualism, Cummins' (1979, 1981, 1984) has proposed an interactive theoretical proposition: children who do not achieve balanced proficiency in two languages (but who are immersed in a bilingual environment) may be cognitively 'different' and possibly 'disadvantaged'.

Any detailed conclusions concerning the relationship between the bilingual character of children and their cognitive functioning must continue to remain tentative (Diaz, 1983). However, it is the case that:

- 1 Bilingual children have been found to score lower than monolingual children on standardized measures of cognitive development, intelligence and school achievement.
- 2 Bilingual children have been found to score higher than 'matched' monolinguals on specific Piagetian, metalinguistic, concept-formation and creative cognitive tasks.
- 3 'Balanced' bilingual children have outperformed monolinguals and 'unbalanced' bilinguals on specific cognitive and metalinguistic tasks.

Social/Communicative Aspects of Bilingualism

As previously noted, language is a critical social repertoire. The linguistic component of any social interaction most often determines the general quality of that interaction (Bates, 1976; Canale, 1983; Cole, Dore, Hall and Dowley, 1978; Halliday, 1975; Hymes, 1974; Ramirez, 1985; Shantz, 1977). In doing so, it carries special importance for the bilingual child where social tasks include language choice. Moreover, like other children who acquire the ability to differentially employ linguistic codes determined by social attributes of the speaking context (Ervin-Tripp and Mitchell-Kernan, 1977; Phillips, 1972), bilingual children face the task of multiple code differentiation. Implicit in this discussion is the general notion that languages must not only be mastered in a structural sense and operate in conjunction with cognitive processes, they must be utilized as a social instrument. For Chicano children this means being communicatively competent in Spanish and English cultural contexts.

The study of language acquisition in context is known as *pragmatics* (Bates, 1976). This approach demands that we think of the context of communication as involving information about the speaker, the listener, the speaker's goal in using a particular utterance, the information assumed to be true in a particular speech context, and the rules governing discourse. For example, in considering the controversial rules for discourse, three aspects of language may be considered important: (a) how the child establishes a topic; (b) maintains a topic; or (c) changes the topic across 'turns' in a conversation. Adult speakers are generally adept at introducing a new topic into a conversation, by using such conventional routines as 'Let me tell you about X' or 'You'll never guess what happened today' or 'I want to talk to you about Y'. Adults can also maintain this topic across many turns in conversation, even when the other person participating is not particularly cooperative. Interest in these social contexts has generated studies in Chicano bilingual mother-child, teacher-child, and child-child interaction. Garcia (1983) reports an investigation of mother-child interaction including the description of Spanish/English use by children and adults (the children's mothers) in three different contexts: (a) preschool instruction periods, (b) preschool freeplay periods, and (c) the home. These descriptions pointed out very consistently that children, in particular, were 'choosing' to initiate an interaction in either Spanish or English as a function of the language in which the mother was using to initiate

that interaction. A closer qualitative examination of the same mothers and children interacting is reported by Garcia and Carrasco (1981). This analysis suggested that almost 90 per cent of mother-child interactions were initiated by the mother, most often in Spanish. That is, mothers most often did not allow children to initiate. For those small number of instances in which children did initiate, the topic determined language choice. That is, 'what' the child spoke about was highly correlated with the language in which he/she chose to speak.

The richest data on the bilingual children dealing with topic initiation comes from child-child interactions. Ginishi (1981) investigated the use of Spanish and English among first-graders and concluded that the general language initiation rule for these students was: 'Speak to the listener in his/her best language'. Her analysis suggests that children when speaking with other children, first made a choice regarding language of initiation based on their previous language use history with their fellow students. Zentella (1981) agrees that bilingual students do make these decisions. She found, however, another discourse rule operating: 'You can speak to me in either English or Spanish'. Although Ginishi's (1981) and Zentella's (1981) discourse rules differ, each observation suggests that bilingual students will make use of their social and language use history to construct guidelines related to discourse initiation. These studies suggest that particular sociolinguistic environments lead bilingual students to be aware of language choice issues related to discourse initiation.

A comprehensive understanding of early childhood bilingualism must, therefore, take into consideration more than the linguistic nature of the bilingual or the child's cognitive attributes. It must consider the child's surrounding environment. Recent data tentatively suggests that social context will determine:

- 1 The specific social language rules for each language.
- 2 The roles assigned to each language.

Summary

The linguistic, cognitive and social domains of the bilingual experience have been demonstrated as individually important in understanding the essence of the bilingual child. But, the interaction of these would seem to more clearly describe the ongoing developmental quality of bilingualism. This interactive conclusion suggests the following:

- 1 The linguistic, cognitive and social characters of the bilingual child are developing simultaneously.
- 2 Linguistic, cognitive and social development are interrelated. That is, cognitive processing factors may act to influence linguistic and social development. Linguistic development — the ability to operate within the structural aspects of language(s) — may act to influence social and potential cognitive functioning. In turn, the development of social competence influences directly the acquisition of linguistic and cognitive repertoires.

This interactive conceptualization is meant to reflect the interrelationship between linguistic, cognitive and social aspects of bilingual development often

missing in educational programming for this population. Changes in each of these domains may be attributed to changes in other domains, and in turn, may further alter the qualitative character of the bilingual. It is recent linguistic, cognitive and social discourse data related to bilingualism that has transformed the study of bilingualism from a purely linguistic framework into one that requires an integrative conceptualization. This integrated research which considers as important the linguistic, cognitive and social aspects of bilingualism promises a greater understanding of this phenomenon than previous non-integrated investigations.

Second Language Acquisition

McLaughlin (1985) traces the reported scholarly interest in second language acquisition to the third millennium BC when Sumerian scholars received the task of translating their Arkadian conquerors' language into their own. Egyptian historical records indicate that by 1500 BC multilingual dictionaries were available. According to McLaughlin (1985), Egyptians and Jews received educational experiences in Greek, and Jewish scholars developed the comparative study of Semitic and non-Semitic languages, the scholarly foundation for modern comparative linguistics.

McLaughlin (1985) and Richards and Rodgers (1986) provide incisive updated reviews of the development of theoretical and instructional contributions related to second language acquisition. These authors agree that several themes characterize the historical treatment of this phenomenon with respect to minority students and Chicano students in particular. These themes include:

- 1 An interest in the relationship between first language and second language acquisition and input.
- 2 An understanding that the individual and social circumstances within which a second language is acquired can determine the course of second language acquisition.
- 3 A concern for psychological/cognitive processes utilized during second language acquisition.

The following discussion will explore these themes in recent research and theoretical contexts.

First and Second Language Acquisition

Learners' errors have been considered significant in proving an understanding regarding the strategies and processes the learner is employing during second language acquisition (Corder, 1967). Dulay and Burt (1974) studied the errors in the natural speech of one hundred and seventy-nine 5 to 8-year-olds (including a sample of Chicano children in California) learning English as a second language. They classified errors as either related to first language ('interference' errors) or related to normal language development ('developmental' errors). Their analysis indicated that 'interference' accounted for only 4.7 per cent of the errors while

87.1 per cent of the errors were similar to those made by children learning English as a first language. They postulated that a universal 'creative construction process' accounts for second language acquisition. The process was creative because nobody had modeled the type of sentences that children produce when acquiring a second language. Furthermore, they suggested that innate mechanisms caused children to use certain strategies to organize linguistic input. Dulay and Burt did not claim that they could define the specific nature of the innate mechanisms. They did claim, however, that these mechanisms have certain definable characteristics that cause children to use a limited set of hypotheses to deal with the knowledge they are acquiring. The strategies parallel those identified for first language acquisition.

Krashen (1981) has developed a conceptualization of second language acquisition which considers as fundamental this innate creative construction process. His 'natural order' hypothesis indicates that the acquisition of grammatical structures by the second language learner proceeds in a predictable 'natural' order, independent of first language experiences and/or proficiency. Such acquisition occurs unconsciously without the learner's concern for recognizing or utilizing structural rules. This 'monitor' hypothesis suggests that conscious learning of a second language can occur when the learner has achieved a significant knowledge of structural rules and has the time to apply those rules in a second language learning situation. Krashen, therefore, extends Dulay and Burt's creative construction and natural order conceptualizations by introducing the notion of the 'monitor' hypothesis, learning a second language by first understanding the grammatical structure and having the time to apply that grammatical knowledge. He concludes, however, that conscious learning of a second language is not as efficient or functional as the natural-acquisition of a second language.

Other research has documented a distinct interrelationship between first and second language acquisition. Ervin-Tripp (1974) conducted a study of thirty-one English-speaking children between the ages of 4 and 9 who were living in Geneva and were attending French schools. She found that the errors these children made in French, their second language, were a result of their application of the same strategies that they had used in acquiring a first language. Such strategies as over-generalization, production simplification, and loss of sentence medial items, all predicted the kinds of errors that appeared. In over-generalization the American children acquiring French applied a subject-verb-object strategy to all sentences in French, and thus systematically misunderstood French passives. In production simplification they resisted using two forms if they felt that two forms had the same meaning. Also, medial pronouns were less often imitated than initial, or final pronouns. She believed that interference errors occurred only when the second language learner was forced to generate sentences about semantically difficult material or concepts unfamiliar in the new culture.

Moreover, the strategies children use in acquiring a second language may change as they become more proficient in the second language. At the beginning of second language (L2) acquisition, imitation plays an important role in language learning. As children acquire more of the target language they begin to use first language (L1) acquisition strategies to analyze this input.

Hakuta (1974) demonstrated that the child, through rote memorization, acquires segments of speech called 'prefabricated patterns'. Examples of these prefabricated patterns are various allomorphs of the copula, the segment 'do you'

as employed in questions, and the segment 'how to' as embedded in how questions. These patterns are very useful in communication. The child uses these patterns without understanding their structure but rather with knowledge of which particular situations call for what patterns in order to communicate in the target language.

Wong-Fillmore (1976) spent a year observing five Spanish-speaking Chicano children acquiring English naturally, and she noticed the same phenomena. The first thing the children did was to figure out what was being said by observing the relationship between certain expressions and the situational context. They inferred the meaning of certain words they began to use as 'formulaic expressions'. (These expressions were acquired and used as analyzed wholes.) The 'formulaic expressions' became the raw material used by the children to figure out the structure of the language. Wong-Fillmore gave two examples of how children use first language acquisition strategies to begin to analyze these expressions:

The first involves noticing how parts of expressions used by others vary in accordance with changes in the speech situation in which they occur. The second involves noticing which parts of the formulaic expressions are like other utterances in the speech of others (p. 15).

As the children figured out which formulas in their speech could be varied, they were able to 'free' the constituents they contained and use them in productive speech.

In addition, at the beginning of L2 acquisition, children seem to depend much more on first language transfer strategies. As learners acquire more of the second language they depend less on these strategies and more on such strategies characteristic of first language acquisition as over-generalization (Hakuta, 1986).

As McLaughlin (1985) has summarized, children acquiring a second language may depend initially on transfer from the first language and on imitation and rote memorization of the second language. In more practical terms, the less interaction a second language learner has with native speakers, the more likely transfer from the first language to the second language will be observed. As the second language is acquired many of the strategies that children use to acquire the second language seem to be the same as those used in first language acquisition.

The Importance of L2 Input

It is apparent that target-language input provides children with the raw material necessary for language acquisition. In addition, the frequency and salience of forms in the input data influence the presence of these forms in the output. Hatch (1974) found that the frequency of morphemes in the input data appears to influence the sequential acquisition of these morphemes. For example, the order of acquisition of question words appears to parallel their frequency in what children heard. She also noted an interaction between frequency of forms and semantic importance. A form appearing frequently, though of low semantic importance, will be acquired later. Larsen-Freeman (1976) found that in-class teacher talk of ESL teachers showed a similar rank order for frequency of

morphemes as found in the learner output. Hakuta (1975) discovered that the auxiliary most often omitted by learners in utterances involving the catenative 'gonna' was 'are'. He found such a construction less perceptually salient to the learner because of its absence. The auxiliary because of its absence in the input resulted in its omission in the learner's output.

These observations make researchers (Hakuta, 1975; Hatch, 1974; Larsen-Freeman, 1976) question whether the invariant order of morpheme acquisition (Dulay and Burt, 1974) is a reaction to the input to which the learner was exposed. The correspondence between input and output suggests that interaction between speakers might be important in structuring language output. Even Krashen (1981), a proponent of the natural order of grammatical acquisition, suggests in his 'input' hypothesis that second language learning is enhanced under conditions in which the learner is provided with input that contains 'the next level of linguistic competence'. Krashen (1981) identifies this enhancement strategy as 'providing comprehensible input'. Paradoxically, however, he cautions against any conscious strategy to provide 'comprehensible input' and instead suggests natural interaction which focuses on meaning. Therefore, even though second language learning may be enriched by providing 'comprehensible input', any attempt to do so without the 'natural' concern for conveying meaning could be linguistically disruptive.

Conversely, Keenan (1976) hypothesizes that the interactions from which syntactic structures develop are determined by the rules of discourse. As indicated earlier in this chapter, certain rules are generally followed in order to carry on a conversation. One must get the attention of the conversational partner. The speaker then nominates a topic and develops it. Partners take turns. Topic clarification, shifting, avoidance, and interruption characterize interactions. Finally the topic is terminated.

Adult-child and child-child conversations are very difficult. Each genre of conversation follows the rules of discourse but the rules are applied differently. As a consequence, the child acquiring another language learns different things from each type of conversation. In adult-child conversations the rules of discourse put both the child and the adult under certain constraints (Garcia, 1986; Hatch, 1978; McLaughlin, 1985). These constraints structure the interaction, and consequently also the output. The child must first get the adult's attention. Once this is accomplished by gestures and verbalizations the child must nominate a topic. The adult is also constrained by the rules of discourse in that the response must be relevant. For the response to be relevant, the information about the topic must be shared by both child and adult. The adult's response usually clarifies the topic that has been nominated by labeling it or asking for more information about it. *What, where, whose, what color, how many, what is x doing, can x verb, is x verb-ing* are the kinds of questions the adults can use in response to the child's topic nomination and be relevant. The child's response in turn must also be relevant. As a result there is a great deal of what, where, whose, who is verb-ing, etc. Hatch (1978) hypothesized that this accounted for the order of acquisition of these forms in previous studies. If the child is unable to say something relevant he or she can just repeat what the adult has said, but with the appropriate intonation. He or she will answer a question with rising intonation and a statement with falling intonation.

In summary, current research suggests that natural communication situations

must be provided for second language acquisition to occur. Regardless of the differences in emphasis of the theories discussed above, recent theoretical propositions regarding second language acquisition propose that through natural conversations the learner receives the necessary input and structures which promote second language acquisition. This finding suggests that in schooling situations highly segregated Chicano classrooms may significantly limit L2 acquisition while L1-L2 integrated classrooms will promote L2 acquisition.

Social Factors Related to Second Language Acquisition

There are sociocultural variables that contribute to a child's motivation to communicate in the target language. The attitude that the learner has towards members of the cultural group whose language he or she is learning influences language acquisition. Gardner and Lambert (1972) found that the positive attitude of English-speaking Canadians towards French-speaking Canadians led to high integrative motivation to learn French. Oller and colleagues (Oller, Baca and Vigil, 1978; Oller, Hudson and Liu, 1977) investigated the relationship between Chinese, Japanese, and Chicano students' achievement in English with their attitude towards the foreign language group. Positive attitudes toward the target language group corresponded to higher language proficiency.

Schumann (1976) found that Chicano children are more motivated to learn a second language if they do not perceive this learning process as alienation from their own culture. If a child belongs to a family whose integration pattern is preservation of the native language and culture rather than assimilation or acculturation, the child may be less motivated to acquire the second language. There may be less impetus for a cultural group to assimilate or acculturate if that group has its own community in the 'foreign country', or if the duration of residence in the foreign country is short.

Not only is the individual's attitude toward the target culture important, but the perceived positive or negative relationship between two cultures influences second language acquisition. Schumann (1976) hypothesized that the greater the social distance between the two cultures, the greater the difficulty the second language learner will have in learning the target language, and conversely, the smaller the social distance, the better will be the language learning situation. Social distance is determined in part by the relative status of two cultures. Two cultures that are politically, culturally, and technically equal in status have less social distance than two cultures whose relationship is characterized by dominance or subordination. In addition, there is less social distance if the cultures of the two groups are congruent.

A child motivated to learn a second language still needs certain social skills to facilitate his or her ability to establish and maintain contact with speakers of the target language. Wong-Fillmore (1976) and Wong-Fillmore and Valadez (1986) suggest that individual differences in the social skills of the child influence the rate of second language acquisition. Second language learners who seem most successful employ specific social strategies:

- 1 Join a group and act as if you understand what's going on even if you don't. The learners must initiate interactions and pretend to know what is

going on. As a result they will be included in the conversations and activities.

- 2 Give the impression with a few well chosen words that you can speak the language. Children must be willing to use whatever language they have and as a result, other children will keep trying to communicate with them.
- 3 Count on your friends for help. The acquisition of language depends on the participation of both the learner and someone who already speaks the language — the friend. The children's friends helped in several ways. They showed faith in the learner's ability to learn the language, and by including the learner in their activities they made a real effort to understand what the learner was saying. They also provided the learner with natural linguistic input that he or she could understand.

Seliger (1977) has also demonstrated that high-input generators are the most successful L2 learners. High-input generators are learners who place themselves in situations in which they are exposed to the target language and are willing to use it for communication. Therefore they receive the necessary input as well as the opportunity for practice.

In summary, children acquire a second language naturally. Although the underlying cognitive processes used by children in acquiring a second language may be similar in all children, social factors in social skills and the social climate do seem to influence directly and significantly second language acquisition. For Chicano language minority students, a schooling context which promotes L1 and provides the opportunity for L2 interaction is most likely to achieve successful L2 acquisition.

Summary

From the above review of second language acquisition theory and research, 'second language' acquisition:

- 1 has been characterized as *related* and *not related* to acquisition of L1 linguistic structures;
- 2 has been related to specific rules of discourse;
- 3 may be influenced by the motivation to learn a second language; and,
- 4 has been related to social factors.

Hammerly (1985) has also suggested that it is useful to indicate what second language acquisition is *not*:

- 1 an intellectual exercise in involving the understanding and memorization of grammar;
- 2 translation;
- 3 memorization of sentences;
- 4 mechanical conditioning; and/or,
- 5 applying abstract rules.

Our understanding of second language acquisition requires cognizance of similar interrelationship identified in this chapter when discussing the nature of bilingualism. Each phenomenon has been 'diagnosed' as dependent on L1-L2 crosslinguistic effects in combination with the social aspects of language use and the psychological/cognitive processes which serve and guide learning. Certain theoretical emphases and contradictions discussed in this chapter continue to remind us that our understanding of second language acquisition remains incomplete. This is not to suggest that little is known. The above discussion has presented a large body of research and various sophisticated conceptualizations (theories) to guide our understanding of this phenomenon.

From Bilingual Education to Language Minority Education

The debate regarding the education of Chicano students in the United States has centered on the instructional use of the two languages of the bilingual student. With regard to the schooling process, the broader issue has been the effective instruction of a growing population of ethnic minority students who do not speak English and therefore are considered candidates for special educational programming that takes into consideration this language difference. Discussion of this issue has included cross-disciplinary dialogues involving psychology, linguistics, sociology, politics, and education (for a more thorough discussion of these issues see August and Garcia, 1988; Baker and de Kanter, 1983; Cummins, 1979; Garcia, 1983; Hakuta and Gould, 1987; Rossell and Ross, 1986; Troike, 1981; and Willig, 1985). The central theme of these discussions has to do with the specific instructional role of the native language. At one extreme of this discussion, the utilization of the native language is recommended for a significant part of the non-English-speaking student's elementary school years, from 4-6 years, with a concern for native language communicative and academic 'mastery' prior to immersion into the English curriculum (Wong-Fillmore and Valadez, 1986). At the other extreme, immersion into an English curriculum is recommended early — as early as preschool — with minimal use of the native language and a concern for English language 'leveling' by instructional staff to facilitate understanding on behalf of the limited-English-speaking student (Rossell and Ross, 1986).

Each of these disparate approaches argues that the result of its implementation brings psychological, linguistic, social, political and educational benefits. The 'native language' approach suggests that competencies in the native language, particularly as they relate to academic learning, provide important psychological and linguistic foundations for second language learning and academic learning in general — that is, 'you really only learn to read once'. Native language instruction builds on social and cultural experiences and serves to politically empower students in communities that have been historically excluded from meaningful participation in majority educational institutions. The 'immersion' approach suggests that the sooner a child receives instruction in English the more likely that student will acquire English proficiency — 'more time on task, better proficiency'. English proficiency will in turn mitigate against educational, social separation and segregation, and ultimate economic disparity.

As this discussion has unfolded, it is clear that the education of students who

come to our schools speaking a language other than English has received considerable research, policy and practice attention in the last two decades. The Departments of Education, Health and Human Services as well as private foundations have supported specific demographic studies and instructional research related to this population of students, preschool through college. The United States Congress has authorized legislation targeted directly at these students on five separate occasions (1968, 1974, 1978, 1984, and 1987) while numerous states have enacted legislation and developed explicit program guidelines. Moreover, Federal District Courts and the US Court have concluded adjudication proceedings that directly influence the educational treatment of language minority students. This significant attention has allowed answers to some questions of importance that were unanswerable less than a decade ago. The following discussion will highlight these questions in light of emerging information regarding Chicano language minority students.

Who Are These Students?

As one searches for a comprehensive definition of the 'language minority' student, a continuum of definitional attempts unfold. At one end of the continuum are general definitions such as 'students who come from homes in which a language other than English is spoken'. At the other end of that continuum are highly operationalized definitions, 'students scored above the first quartile on a standardized test of English language proficiency'. Regardless of the definition adopted, it is apparent that these students come in a variety of linguistic shapes and forms. The language minority population in the United States continues to be linguistically heterogeneous with over 100 distinct language groups identified. For example, some Chicanos are monolingual Spanish speakers while others are to some degree bilingual. Other non-English-speaking minority groups in the United States are similarly heterogeneous. Not inconsequential is the related cultural attributes of this population of students, making this population not only linguistically distinct but also culturally distinct.

Describing the 'typical' Chicano language minority student, as you may have already surmised, is highly problematic. However, put simply, we might agree that the student is one: (a) who is characterized by substantive participation in a non-English-speaking Chicano social environment, (b) who has acquired the normal communicative abilities of that social environment, and, (c) who is exposed to a substantive English-speaking environment, more than likely for the first time, during the formal schooling process. Estimates of the number of language minority students have been compiled by the federal government on several occasions (Development Associates, 1984; O'Malley, 1981). These estimates differ because of the definition adopted for identifying these students, the particular measure utilized to obtain the estimate, and the statistical treatment utilized to generalize beyond the actual sample obtained. For example, O'Malley (1981) defined the language minority student population by utilizing a specific cutoff score on an English language proficiency test administered to a stratified sample of students. Development Associates (1984) estimated the population by utilizing reports from a stratified sample of local school districts. Therefore, estimates of language minority students have ranged between 1,300,000

(Development Associates, 1984) to 3,600,000 (O'Malley, 1981) with the following attributes:

- 1 The total number of language minority children, ages 5-14, in 1976 approximated 2.52 million, with a projected increase to 3.40 million in the year 2000 (Waggoner, 1984). In 1983, this population was more conservatively estimated to be 1.29 million (Development Associates, 1984). Recall that this divergence in estimates reflects the procedures used to obtain language minority 'counts' and estimates.
- 2 The majority of these children reside throughout the United States, but with distinct geographical clustering. For example, about 62 per cent of language minority children are Chicano students found in Arizona, Colorado, California, New Mexico, and Texas (Development Associates, 1984; O'Malley, 1981; Waggoner, 1984).
- 3 Of the estimated number of language minority children in 1978, 72 per cent were of Spanish language background, 22 per cent other European languages, 5 per cent Asians, and 1 per cent American Indian. However, such distributions will change due to differential growth rates, and by the year 2000, the proportion of Spanish language background children is projected to be about 77 per cent of the total (O'Malley, 1981). Estimates by Development Associates (1984) for students in grades K-6 indicate that 76 per cent are Spanish language background; 8 per cent Southeast Asian (Vietnamese, Cambodian, Hmong, etc.); 5 per cent other European; 5 per cent East Asian (Chinese, Korean, etc.); and, 5 per cent other (Arabic, Navaho, etc.).
- 4 For the national school districts sampled in the nineteen most highly impacted states utilized by Development Associates (1984), 17 per cent of the total K-6 student population was estimated as language minority in these states.

Regardless of differing estimates, a significant number of students from language backgrounds other than English are served by US schools. Moreover, this population is expected to increase steadily in the future. The challenge these students present to US educational institutions will continue to increase concomitantly.

What Types of Educational Programs Serve These Students?

For a school district staff with language minority students there are many possible program options: 'transitional bilingual education', 'maintenance bilingual education', 'English-as-a-second-language', 'immersion', 'sheltered English', 'submersion', etc. (Government Accounting Office, 1987). Ultimately, staff will reject program labels and instead answer the following questions (August and Garcia, 1988).

- 1 What are the native language (L1) and second language (L2) characteristics of the students, families and community (ies) we serve?

- 2 What model of instruction is desired?
 - (a) How do we choose to utilize L1 and L2 as mediums of instruction?
 - (b) How do we choose to handle the instruction of L1 and L2?
- 3 What is the nature of staff and resources necessary to implement the desired instruction?

These program initiatives can be differentiated by the way they utilize the native language and English during instruction. A recent report by Development Associates (1984) surveyed 333 school districts in the nineteen states that served over 80 per cent of language minority students in the United States. For grades K-5, they report the following salient features regarding the use of language(s) during the instruction of language minority students:

- 1 Ninety-three per cent of the schools reported that the use of English predominated in their programs; conversely, 7 per cent indicated that the use of the native language predominated.
- 2 Sixty per cent of the sampled schools reported that both the native language and English were utilized during instruction.
- 3 Thirty per cent of the sampled schools reported minimal or no use of the native language during instruction.

Two-thirds of these schools have chosen to utilize some form of bilingual curriculum to serve this population of students. One-third of these schools minimize or altogether ignore native language use in their instruction of language minority students. Recall that some two-thirds to three-fourths of language minority students in this country are of Spanish-speaking backgrounds. Programs which serve these students have been characterized primarily as 'Bilingual Transitional Education'. These programs call for the transition of these students from early-grade, Spanish-emphasis instruction to later-grade, English-emphasis instruction, and, eventually to English-only instruction.

Recent research in transition-type schools suggests that language minority students can be served effectively. These effective schools are organized to develop educational structures and processes that take into consideration both the broader aspects of effective schools reported for English-speaking students (Purkey and Smith, 1983) as well as specific attributes relevant to language minority students (Carter and Chatfield, 1986; Garcia, 1988; Tikunoff, 1983). Of particular importance has been the positive effect of intensive instruction in the native language that focuses on literacy development (Wong-Fillmore and Valadez, 1986). Hakuta and Gould (1987) and Hudelson (1987) maintain that skills and concepts learned in the native language provide a 'scaffold' for acquisition of new knowledge in the second language.

For the one-third of the students receiving little or no instruction in the native language, two alternative types of instructional approaches likely predominate: ESL and immersion. Each of these program types depends on the primary utilization of English during instruction but does not ignore the fact that the students served are limited in English proficiency. However, these programs do not require instructional personnel who speak the native language of the student. Moreover, these programs are suited to classrooms in which there is no

substantial number of students from one non-English-speaking group, but instead may have a heterogeneous non-English background student population (Ovando and Collier, 1985).

Both ESL and immersion programs have been particularly influenced by recent theoretical developments regarding the instruction of a second language (Chamot and O'Malley, 1986; Krashen, 1984). These developments have suggested that effective second language learning is best accomplished under conditions that simulate natural communicative interactions and minimize the formal instruction of linguistic structures, e.g., memorization drills, learning grammatical rules, etc. Although ESL programs continue to involve 'pull-out' sessions in which students are removed from the regular classroom to spend time on concentrated language learning activities with specially trained educational staff, the recent theoretical and practice consensus is that such language learning experiences should be communicative and centered around academic content areas (Chamot and O'Malley, 1986).

School district staff have been creative in developing a wide range of language minority student programs. They have answered the above questions differentially for: (a) different language groups (Spanish, Vietnamese, Chinese, etc.), (b) different grade levels within a school, (c) different sub-groups of language minority students within a classroom, and even different levels of language proficiency. The result has been a broad and at times perplexing variety of program models.

What Federal and State Policies Have Been Generated?

The immediately preceding discussion has attempted to lay a foundation for understanding *who* the Chicano language minority student is and *how* that student has been served. This discussion turns now to educational policy: first, federal legislative and legal initiatives, and second, state initiatives.

Federal Legislative Initiatives

The United States Congress set a minimum standard for the education of language minority students in public educational institutions in its passage of Title VI of the Civil Rights Act of 1964 prohibiting discrimination by educational institutions on the basis of race, color, sex or national origin and by subsequent Equal Educational Opportunity Act of 1974 (EEOA). The EEOA was an effort by Congress to specifically define what constitutes a denial of constitutionally guaranteed equal educational opportunity. The EEOA provides in part:

No state shall deny equal educational opportunities to an individual on account of his or her race, color, sex, or national origin, by . . . the failure by an educational agency to take appropriate action to overcome language barriers that impede equal participation by students in its instructional programs. 20 USC ss 1703(f).

This statute does not mandate specific education treatment, but it does require public educational agencies to sustain programs to meet the language needs of their students.

The Congress of the United States on five occasions (1968, 1974, 1978, 1984, and 1987) has passed specific legislation related to the education of language minority students. The Bilingual Education Act (BEA) of 1968 was intended as a demonstration program designed to meet the educational needs of low-income limited-English-speaking children. Grants were awarded to local educational agencies, institutions of higher education, or regional research facilities to: (a) develop and operate bilingual education programs, native history and culture programs, early childhood education programs, adult education programs, and programs to train bilingual aides; (b) make efforts to attract and retain as teachers, individuals from non-English-speaking backgrounds; (c) establish co-operation between the home and the school.

Four major reauthorizations of the BEA have occurred since 1968 — in 1974, 1978, 1984 and 1987. As a consequence of the 1974 Amendments (Public Law 93-380), a bilingual education program was defined for the first time as 'instruction given in, and study of English and to the extent necessary to allow a child to progress effectively through the education system, the native language' (Schneider, 1976, p. 146). The goal of bilingual education continued to be a transition to English rather than maintenance of the native language. Children no longer had to be low-income to participate. New programs were funded, including a graduate fellowship program for study in the field of training teachers for bilingual educational programs, and a program for the development, assessment, and dissemination of classroom materials.

In the Bilingual Education Amendments of 1978 (Public Law 95-561), program eligibility was expanded to include students with limited-English academic proficiency as well as students with limited-English-speaking ability. Parents were given a greater role in program planning and operation. Teachers were required to be proficient in both English and in the native language of the children in the program. Grant recipients were required to demonstrate how they would continue the program when federal funds were withdrawn.

The Bilingual Education Act of 1984 created new program options including special alternative instructional programs that did not require use of the child's native language. These program alternatives were expanded in 1987. State and local agency program staff were required to collect data, to identify the population served and describe program effectiveness. Over one billion federal dollars have been appropriated through Title VII legislation for educational activities (program development, program implementation, professional training, and research) for language minority students. In addition, other congressional appropriations (e.g., Vocational Education, Chapter I, etc.) explicitly target language minority students.

Federal Legal Initiatives

The 1974 United States Supreme Court decision in *Lau v. Nichols* (44 US 563) is the landmark statement of the rights of language minority students indicating that limited-English-proficient students must be provided with language support:

[T]here is no equality of treatment merely by providing students with the same facilities, textbooks, teachers, and curriculum: for students who do not understand English are effectively foreclosed from any meaningful discourse.

Basic English skills are at the very core of what these public schools teach. Imposition of a requirement that, before a child can effectively participate in the education program he must already have acquired those basic skills is to make a mockery of public education. We know that those who do not understand English are certain to find their classroom experiences wholly incomprehensible and in no way meaningful (*Lau v. Nichols*, 44 US 563, p. 17).

The fifth Circuit *Castaneda v. Pickard* (1981) court set three requirements that constitute an appropriate program for language minority students:

- 1 The theory must be based on a sound educational theory.
- 2 The program must be 'reasonably calculated to implement effectively' the chosen theory.
- 3 The program must produce results in a reasonable time.

The courts have also required appropriate action to overcome language barriers. 'Measures which will actually overcome the problem', are called for by the *US v. Texas* (506 F. Supp. at 43), or 'results indicating that the language barriers confronting students are actually being overcome' are mandated by the *Castaneda* court (628 F. 2nd at 1010). Therefore, local school districts and state education agencies have a burden to assess the effectiveness of special language programs on an ongoing basis. Other court decisions have delineated staff professional training attributes and the particular role of standardized tests.

State Initiatives

Through state legislation, twelve states named mandate special educational services for language minority students, twelve states permit these services, and one state prohibits them. Twenty-six states have no legislation that directly addresses language minority students.

State program policy for language minority students can be characterized as follows:

- 1 Implementing instructional programs that allow or require instruction in a language other than English (17 states).
- 2 Establishing special qualifications for the certification of professional instructional staff (15 states).
- 3 Providing school districts supplementary funds in support of educational programs (15 states).
- 4 Mandating a cultural component (15 states).
- 5 Requiring parental consent for enrollment of students (11 states).

Eight states (Arizona, California, Colorado, Illinois, Indiana, Massachusetts, Rhode Island, and Texas) impose all of the above requirements concurrently. Such a pattern suggests continued attention by states to issues related to language minority students (see August and Garcia, 1988, for details).

General Policy and Practice Implications for Education

The previous discussions of bilingual acquisition and second language acquisition have attempted to highlight important data and theory that serve to provide an understanding of these phenomena. These same data and theory, however, have influenced the educational treatment of Chicano language minority students. As indicated previously, the knowledge based on this area continues to expand, but is in no way to be considered complete or overly comprehensive. In addition, it would be an error to conclude that the data and theory emerged have been a primary factor in determining the educational treatment of language minority students. It does seem appropriate, however, to identify in the present discussion possible program and policy implications derived from research and theory as highlighted by our own discussion and that of Hakuta and Snow (1986), August and Garcia (1988) and Hakuta and Garcia (1989).

- 1 One major goal of Chicano language minority education should be the development of the full repertoire of linguistic skills in English, in preparation for participation in mainstream classes.
- 2 Time spent learning the native language is not time lost in developing English. Children can become fluent in a second language without losing the first language, and can maintain the first language without retarding the development of the second language.
- 3 There is no cognitive cost to the development of bilingualism in children; very possibly bilingualism enhances children's thinking skills.
- 4 Language minority education programs for Chicanos should have the flexibility of adjusting to individual and cultural differences among children. Furthermore, educators should develop the expectation that it is not abnormal for some students to need instruction in two languages for relatively long periods of time.
- 5 Educators should expect that young children will take several years to learn a second language to a level like that of a native speaker. At the same time, they should not have lower expectations of older learners, who can typically learn languages quite quickly.
- 6 Particularly for children who on other grounds are at risk for reading failure, reading should be taught in the native language. Reading skills acquired in the native language will transfer readily and quickly to English, and will result in higher ultimate reading achievement in English.
- 7 A major problem for minority-group children is that young English-speaking children share the negative stereotypes of their parents and the society at large. Any action that upgrades the status of the minority child and his language contributes to the child's opportunities for friendship with native English-speaking children.

In summary, theoretical (and to some extent, research) support can be identified for educational interventions that choose to utilize language in a variety of distinct ways within an educational program for language minority students. It seems necessary to conclude that the present state of research and theory with respect to the language and the education of Chicano language minority students does allow for some specific conclusions. Of course, it is recommended that educational professionals in their quest to intervene for betterment of Chicano students, carefully scrutinize relevant theory and research and utilize that analysis to design, implement and evaluate interventions of significance to their particular educational circumstances. It is fair to request from such designers and implementers to provide a clear theoretical and research foundation, one which can in turn receive the necessary careful scrutiny.

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